LAS / MFOA
Asset Management Symposium
Why the Financial Stuff Matters
March 25, 2015
AMP’s are challenging but so are Investments

- Competing short term and long term needs
- More needs than resources available
- Desire to avoid unpleasant events
  - Frozen pipes
  - Negative returns
- Distaste for tax increases
- Distaste for deficit financing
- Distaste for Volatility in earnings
Without an Investment Plan there is No AMP

• An AMP without an Investment Plan is simply a wish list

• The Investment Plan determines how you pay for the wish list
  – Tax increases
  – Interest income on deposits
  – Interest, dividends and capital appreciation
Determine Philosophy

Who should pay

• Current taxpayers pay for current expenses and future taxpayers pay for future expenses

Challenge

• Some of those future expenses are caused by today’s usage
Competing Interests

- Spend now on infrastructure
- Invest now for future spending
Pros and Cons

Spend Now
Pros
• Clear up backlog
• Appeal to voters
• You will be retired or out of office in 15 years
Cons
• Creates a bigger bill down the road
• Bigger tax increases down the road

Invest now
Pros
• Use investment returns to mitigate future tax increases
• Use today’s tax dollars to prepare for future replacement
Cons
• Reduces funds available now for critical needs
• You won’t be around to receive the accolades
Can Investment Returns Really make a Difference

• Yes they can
• As close to free money as you can get
• The cost is tolerance for volatility

Assume $1 mil. Initial investment and additional investments of $1 mill at the end of every year

<table>
<thead>
<tr>
<th>Return %</th>
<th>Value at end of 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>$25,783,318</td>
</tr>
<tr>
<td>4%</td>
<td>$31,969,202</td>
</tr>
<tr>
<td>6%</td>
<td>$39,992,727</td>
</tr>
</tbody>
</table>
Investment Returns can make a big difference

Impact over 20 Years

- **2% Return**
  - Capital Contributions: $4,783,318
  - Investment Earnings: $0

- **4% Return**
  - Capital Contributions: $10,969,202
  - Investment Earnings: $10,969,202

- **6% Return**
  - Capital Contributions: $18,992,727
  - Investment Earnings: $18,992,727
Realistic Earning Rates

• Over the long term equities outperform
• Bonds don’t do well when interest rates rise
• Corporate Bonds provide additional yield (returns) over Government Bonds
• Returns used in previous charts are conservative and realistic
Actual Historical Returns

<table>
<thead>
<tr>
<th></th>
<th>5 Year</th>
<th></th>
<th>10 Year</th>
<th></th>
<th>15 Year</th>
<th></th>
<th>20 Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Return</td>
<td>Volatility</td>
<td>Return</td>
<td>Volatility</td>
<td>Return</td>
<td>Volatility</td>
<td>Return</td>
<td>Volatility</td>
</tr>
<tr>
<td><strong>At December 31, 2014</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPI</td>
<td>1.7%</td>
<td>1.2%</td>
<td>1.7%</td>
<td>1.3%</td>
<td>2.0%</td>
<td>1.3%</td>
<td>1.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Treasury Bills</td>
<td>0.8%</td>
<td>0.1%</td>
<td>1.8%</td>
<td>0.5%</td>
<td>2.4%</td>
<td>0.5%</td>
<td>3.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>GIC's (5 year)</td>
<td>1.8%</td>
<td>0.1%</td>
<td>2.3%</td>
<td>0.2%</td>
<td>2.8%</td>
<td>0.3%</td>
<td>3.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Short Term Bonds (1-5 years)</td>
<td>3.0%</td>
<td>1.4%</td>
<td>3.8%</td>
<td>1.7%</td>
<td>4.8%</td>
<td>1.9%</td>
<td>5.6%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Government Bonds</td>
<td>4.6%</td>
<td>3.3%</td>
<td>4.8%</td>
<td>3.7%</td>
<td>5.8%</td>
<td>3.8%</td>
<td>6.8%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Mid Term Bonds (7-10 years)</td>
<td>6.8%</td>
<td>4.2%</td>
<td>6.1%</td>
<td>4.1%</td>
<td>7.0%</td>
<td>4.3%</td>
<td>7.8%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Canadian Equity</td>
<td>7.5%</td>
<td>10.2%</td>
<td>7.6%</td>
<td>13.9%</td>
<td>7.3%</td>
<td>13.7%</td>
<td>9.6%</td>
<td>14.5%</td>
</tr>
<tr>
<td>U.S. Equity (C$)</td>
<td>17.9%</td>
<td>8.6%</td>
<td>7.3%</td>
<td>11.1%</td>
<td>2.7%</td>
<td>12.5%</td>
<td>8.8%</td>
<td>12.8%</td>
</tr>
</tbody>
</table>
## Determining Asset Mix

<table>
<thead>
<tr>
<th></th>
<th>Bridge Replacement</th>
<th>Road Repair</th>
<th>Arena Roof</th>
<th>Water Treatment Plant</th>
<th>Sewer Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>15 years</td>
<td>2 years</td>
<td>10 years</td>
<td>7 years</td>
<td>12 years</td>
</tr>
<tr>
<td>Equity %</td>
<td>75%</td>
<td>0%</td>
<td>60%</td>
<td>40%</td>
<td>65%</td>
</tr>
</tbody>
</table>

**Percentage of Total Reserve Balance**

|                          | 15% | 17% | 5% | 20% | 43% |

**Total Allocation to Equities**

|                          | 11.25% | 0.00% | 3.00% | 8.00% | 27.95% |

**Consolidated Allocation to Equities**

50.20%
Other Considerations

• Interest rates at historic low levels
• It may make sense to borrow (leverage) for assets that have long life spans
  – Bridge with a 30 year life paid for over 30 years
• Accelerating Infrastructure investments may bring both financial and non financial benefits
  – May increase ability to attract businesses & industry
  – May provide a better quality of life for residents facilitating faster population growth
Recommendations

• Match your investment time horizon to your spending time horizon
• Use Investment Returns to create additional funds
• The cost of volatility is worth it
  – A few sleepless nights
  – A few stressful meetings
• Prudent Stewardship is a long term approach
Rodgers Investment Consulting

- Established in 1993
- Working with Municipal organizations since 2003
  - Municipal Agencies, ONE & Municipalities
- Independent
  - No affiliations with any investment firms or investment products
- Customized Services
  - All services are customized to each client’s unique needs
- Kelly Rodgers, CFA
  - Over 30 years experience in Investment Management and Consulting
  - Charter Financial Analyst, 1989

krogers@riconsulting.ca  www.riconsulting.ca
416-483-4198